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Chapter 7

Psychological and Ethical Issues in Third Party Assisted Conception and Surrogate Motherhood

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Abstract

The continuing increase in babies born via third party assisted conception (AC) and surrogate motherhood across the world shows the success of -and medical and social demand for -third party interventions in family building. However, with the increasing use of such interventions world-wide, commercialisation and commodification have proliferated. This in turn has led to inequality in access to AC services, in choice of third party input, and in questionable human rights and psychosocial welfare issues. Transitioning to parenthood using third party AC and surrogate motherhood, in addition to requiring equality in access, also demand accuracy of birth and genetic information. In the absence of accurate record keeping, continuing practices of anonymity, and marginalization of the contribution of donors and surrogates, psychological, social, health and ethical questions are raised for donors, recipients and potentially for (genetic, gestational) part, half and full offspring, siblings and others in the extended family such as grandparents.

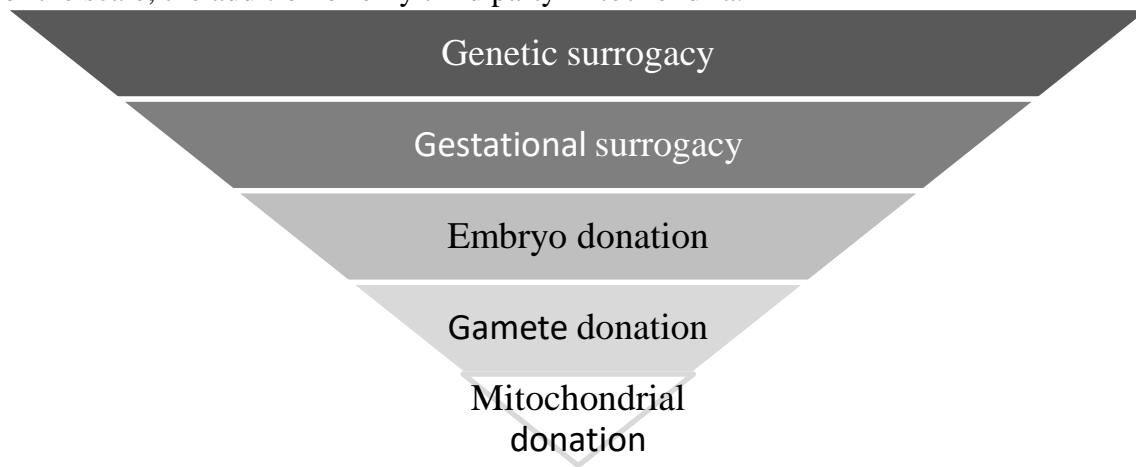
Introduction

The transition to parenthood is one of the most important milestones in an individual's life which for some can be associated with a huge amount of distress and discomfort. The experience of traumatic events pre-pregnancy (when an individual realizes s/he cannot conceive; when a pregnancy is not yet desired; when a conception fails), or during pregnancy (such as miscarriages, foetal abnormalities or death) and post-delivery (such as neonatal death, delivery trauma, post-natal depression or psychosis) can be life changing (van den Akker, 2012). These life changing experiences, many of which are described in the chapters within this book, can also be experienced during AC treatment which in itself is known to be psychologically taxing for many individuals experiencing it (Domar, 2015). AC using third party input such as mitochondrial, gamete, embryo donation and surrogacy add another layer of complexity.

Third party assisted conception

Third party AC requires the assistance of a donor or surrogate and a team of professionals to bring about a pregnancy. It refers to a number of AC treatments and processes which includes another person's (the third party's) mitochondria, gametes or embryo and or a contracted surrogate mother to carry a genetic or gestational pregnancy to term for another person (van den Akker, 2012, 2017). This chapter is concerned with gamete donation and surrogate motherhood, although some of the issues addressed also apply to the more recent practices of mitochondrial donation, (where the mother's faulty mitochondrial DNA is removed from her egg and replaced with healthy mitochondria from a donor egg). The amount of third party input necessary in building a family for recipients varies and is shown in Figure 1. It also potentially relates to the loss of third party input or potential family members in those providing the third party input (Purewal & van den Akker, 2007).

Figure 1: The amount of third party genetic and gestational input provided and lost via third party AC, ranging from a pregnancy and oocytes belonging to the surrogate to at the other end of the scale, the addition of only third party mitochondria.



Demand

Across the world in 2010, an estimated 48.5 million couples worldwide were unable to have a child after five years of trying (Mascarenhas, Flaxman, Boema, Vanderpoel, & Stevens, 2012) with many of them stigmatised in their communities (see for example, Bos et al., Chapter 4 in this volume). The demand for AC stems from the continuing desire for babies, preferably with a genetic or gestational link (van den Akker, 2007), and is also due to increasing numbers of individuals seeking AC against biological and social odds, such as women and men who are older, single or in same sex relationships (Carone, Baiocco, & Lingardi, 2017). AC family units, like adoptive families, require parents able to disclose the use of third parties in their conceptions to ensure their children have accurate genetic and gestational information. In single and same sex parenting third party AC involvement is generally more obvious, but in heterosexual couples this is not always the case.

Open versus hidden practices

Not all countries laws or their religions endorse third party AC practices. For example, Jewish religious authorities are generally ‘pronatalist and gladly accommodate AC technologies’ (Birenbaum-Carmeli, 2016, p16) whereas the Catholic Church although also pronatal, does not condone third party conceptions (Chliaoutakis, Koukouli, & Papadakaki, 2002).

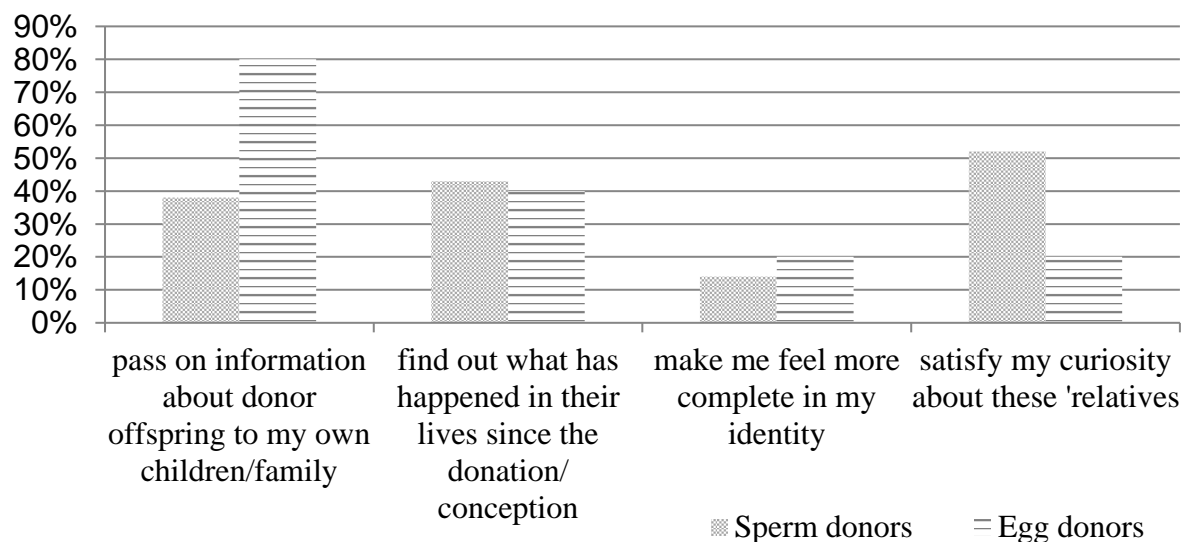
In countries where third party AC is accepted it was (Barton, Walker, & Wiesner, 1945) and still is generally used for the benefit of the new parents with the genetic origins of the child never disclosed (Royal College of Obstetricians & Gynaecologists, 1987). Where third party AC is not accepted, people travel abroad and also often maintain secrecy about the child's origins. Since few countries monitor the numbers or origins of surrogate arrangements and gamete / embryo donations, and no records exist, the concern for the wishes of the parent(s) is adequately addressed but the welfare of the child's right to accurate genetic or gestational information is entirely ignored (Shidlow, 2011). In 2012, an Israeli public health committee recommended that since gay men and single women should be allowed to use a surrogate to have children, they also recommended non-anonymous sperm donation (Pritchard, 2012) as obviously single and same sex parents will have needed gametes and surrogates respectively. This marked a shift in line with other countries' consideration for the welfare of the child - albeit a relatively slow shift. Most countries continue to fail to consider the wider implications of third party AC on the donor or surrogate or on the person conceived.

Disclosure

Disclosure of information about third party assisted conception was recognised decades earlier by a number of other governments and sperm banks as more advantageous for the parties involved – including for the offspring (Blyth & Frith, 2015; Scheib, 2003), although some did not legislate for these changes until the turn of the century. Such changes in practice enabled donor-conceived individuals to understand their biogenetic (genetic/biological) information (Strathern, 2005), a part of their identity reported to be incomplete (van den Akker, Crawshaw, Blyth, & Frith, 2015; Frith, Crawshaw, van den Akker & Blyth, 2017), and also provided the opportunity for donors' to learn about the outcomes of their donation (Blyth & Frith, 2015; Raes, Ravelingien, & Pennings, 2013).

Access to accurate genetic information is increasingly important for health information (Harper, Kennett, & Reisel, 2016) and is a basic human right. The UK Government was the first to legislate for donors details and the outcomes of donations to be registered by the Human Fertilisation and Embryology Authority in 1991 (HFEA, state regulator) (Blyth & Frith, 2015), giving donor-conceived individuals the right to request non-identifying donor information from the HFEA from age 18 and in 2004, all prospective donors were required to agree to disclosure of their identity (HFEA (Disclosure of Donor Information) Regulations 2004/1511). In a study of 21 sperm and 5 egg donors who registered on a voluntary DNA register for donors and donor conceived adult offspring, disclosure of information was welcomed by donors for very personal reasons (Blyth, Crawshaw, Frith, & van den Akker, 2017) as shown in Figure 2. Family and identity also featured as reasons for disclosure for donor conceived adult offspring (van den Akker et al., 2015).

Figure 2: Reasons for searching for genetic relatives (adapted from Blyth et al., 2017).



Fragmented parenthood

Unlike gamete or embryo donation, in surrogate motherhood, the traditional motherhood / parenthood functions are more fragmented with the surrogate contributing to the prenatal, and the recipient parent(s) contributing to the postnatal epigenetic environments. Both epigenetic

contributions can have life-long health effects upon the surrogate child (EpiHealth, 2016). The surrogate mother becomes pregnant (through AC as a gestational surrogate, or through insemination as a genetic surrogate) and carries, and then delivers a baby for another, usually infertile woman, or for a single man or heterosexual or gay couple who cannot achieve a pregnancy (the recipient or commissioning couple). The baby is usually handed over to the commissioning recipient(s) immediately or soon after birth (Sharma, 2006), who then raise it as their own. In gestational surrogacy, using in vitro fertilisation (IVF) treatment the embryo is entirely genetically unrelated to the surrogate mother, and may be (partly or fully) related to the commissioning couple or donors, and is transferred into the surrogates' uterus (American College of Obstetricians and Gynecologists, ACOG, 2008). The process requires medical intervention, and the resultant child could not exist without the explicit selection of gametes, the IVF process, the embryo transfer (ET) and the surrogate. In this case, the commissioning couple may be entirely genetically linked to the embryo or the embryo may come from donated gametes (ACOG, 2008), but the new intended couple were not involved in its gestation. The surrogate on the other hand, finds herself involved in a medical and technological conception, far removed from natural conception. The fragmentation of functions removes the historical reliability of motherhood; *mater semper est* (motherhood is always certain) is now no longer certain (van den Akker, 2017). Similar to the donor insemination trajectory, acceptability of surrogate motherhood is not universal.

Legal parenthood

In most countries, parenthood is legally attributed to biological/ birth motherhood because it was always certain, making the surrogate the legal mother. In gamete or embryo (and mitochondrial) donation, the 'route' to giving birth (origins of gametes/ embryos from a third party) has no legal position. Consequently, in mitochondrial / gamete / embryo donation legal parenthood is bestowed upon the person giving birth, even if neither, only one or part of one

of the new parents donated their own genetic material. The resultant children may never find out their true genetic origins unless they are accurately informed. In surrogacy, the surrogate birth mother is usually the legal mother of the child. The new commissioning parent(s) may or may not have contributed some or all of their genes to the resultant child. These parents, in for example the UK, need to apply for parental responsibility of the child, even if it is entirely genetically related to them. Legal parenthood is therefore not based upon genetic but birth parenthood as shown in figures 3a and 3b. The implications for the offspring are many fold since birth records tend not to show the true genetic or gestational origins. Importantly, depending upon differing national laws, the genetic and or gestational difference brought about via third party reproduction continues to be hidden, marginalized or denied (van den Akker, 2001; 2007). Parents create a new reality or script (Strathern, 2002) which has left many thousands of now grown up third party offspring with inaccurate family histories (Frith, Blyth, Crawshaw, & van den Akker, 2018).

Figure 3a: Legal and contributing parentage of third party conceived children in the UK

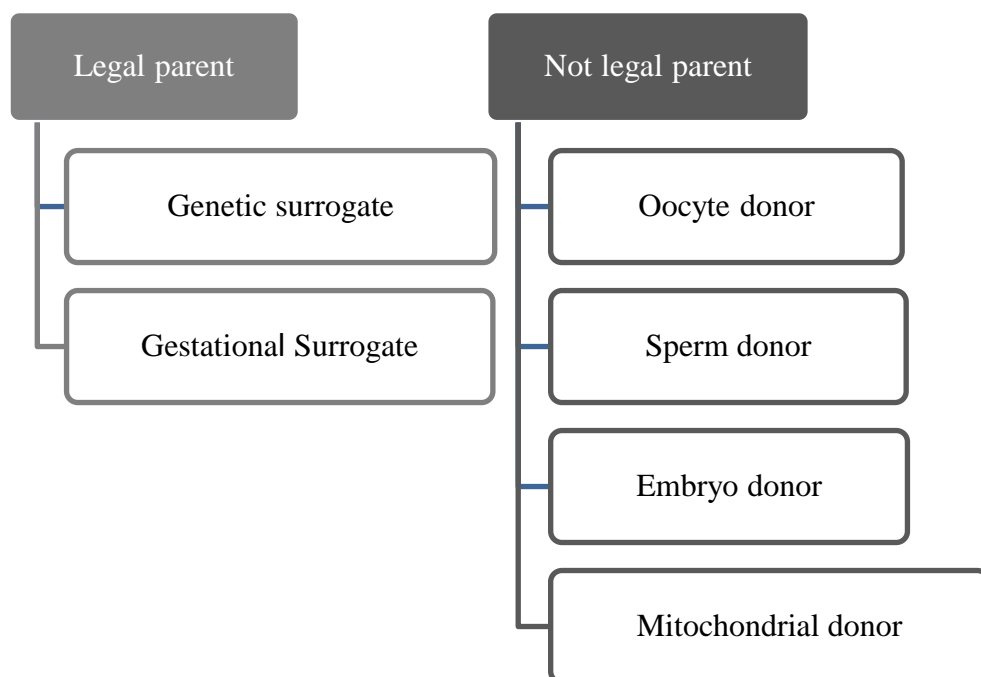
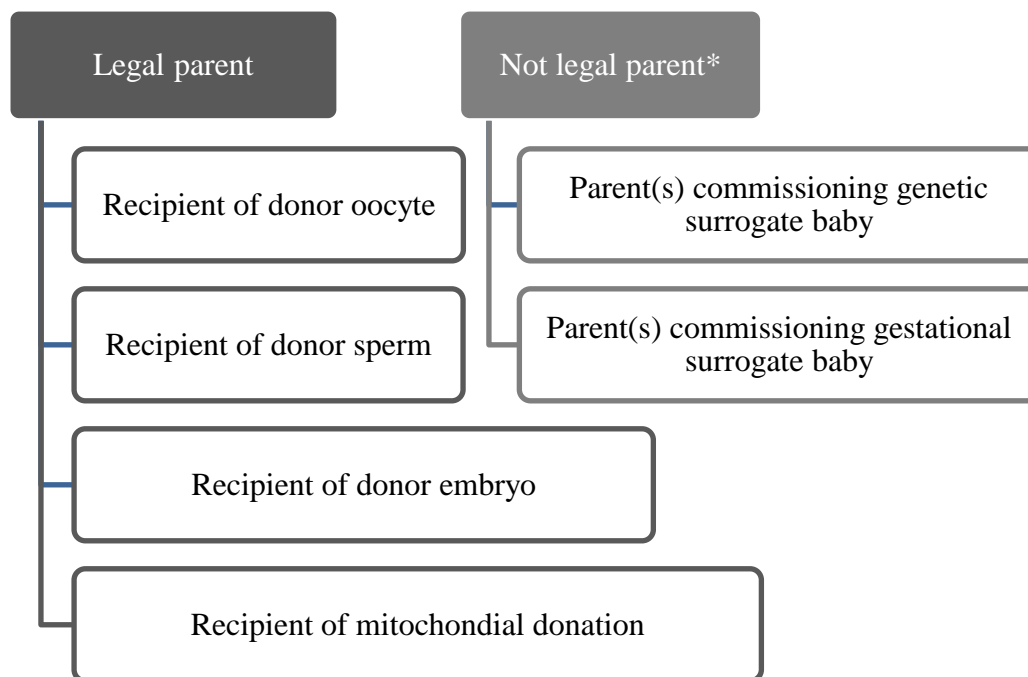


Figure 3b: Legal recipient parentage of third party conceived children in the UK



* Until an application for parental responsibility is made

Governments have a difficult task legislating for or against third party AC treatments as they need to consider current laws across many different departments (child welfare, human rights, birth registrations, legal parenthood, immigration, education and so on) and across different countries – each with their own complex national laws. In the USA the reproductive industry has been referred to as the ‘wild west’ of AC because of its ‘relatively lax and sparse regulation’ of third-party and AC transactions, as no federal legislation effectively regulates the rights and responsibilities of the parties involved including clinicians, intended parents, donors, surrogates, and donor-conceived children (Markens, 2016). In the UK on the other hand, many aspects of surrogacy have remained relatively unaltered over the course of several decades following the Brazier Committee in 1998 (Brazier, Campbell, & Golombok, 1998). The HFEA Act (2008) finally suggested changes to the ways legal parenthood can be ascribed in third party reproduction, taking into account changes to legal parentage for couples in civil partnerships and same sex relationships. Many countries still do not recognise any form of same sex relationships or for single men or women to wish to build a family, making cross

border AC even more difficult to legislate for.

Commercialisation, commodification and inequalities

Third party AC is expensive and time consuming, involving a range of medical interventions to obtain the gametes, create embryos ex-utero and implant these into the mother requesting these or into a surrogate mother. In most countries, these expensive and time consuming treatment processes are (with few exceptions such as Israel) not freely available to all who need it. Third party AC and surrogacy are therefore generally only available to those who can afford these, which has led to substantial inequalities in access to these services world-wide. Such inequalities compound the marginalisation and stigmatisation of individuals who cannot have children (Inhorn & Serour, 2011; van den Akker, 2017). In countries offering commercially available third party reproduction the resultant children are therefore socially the children of relatively affluent parents. Genetically or gestationally they are the children of less affluent or extremely poor parents. The inequalities in access pose breaches in human rights and liberties. It also paves the way for the commodification of commissioning children, based upon the perceived quality of the donors and surrogates. Commercialisation and commodification open up opportunities for market forces delivering babies according to demand, a demand led by purchase preferences. It is unethical to treat human beings as resources to satisfy another person's interests (Orlov & Orlov, 2007) in the same way as it is unethical to partake in people trafficking, sexual exploitation or organ trafficking (Wilkinson, 2003). Some of these practices are known to exist under the pretence of surrogacy (van den Akker, 2017). Finally, commodification via eugenics or genetic selection of the perfect offspring (Pande, 2016) is also unethical.

International commercialization

As surrogacy, gamete and embryo donation are not permitted in some countries, cross border opportunities offer an alternative route to obtaining a new born baby through surrogacy

or to selecting gametes and embryos for own use (Ruiz-Robledillo & Moya-Albiol, 2016). It is always a commercial arrangement. Permissive laws, excellent English speaking clinics and cheaper services make cross border options attractive to Western individuals (Kumar, Inder, & Sharma, 2013). Commercial cross border surrogates such as those available in India, Thailand and Cambodia have been popular in the last decade, although new laws now prohibit Western couples' access to these surrogates. The Indian Surrogacy Bill 2016 for example proposed a ban on gay, foreign and unmarried couples and single people from using Indian surrogates. This proposed law, assumes Indian surrogates are not in control. It also discriminates against gay and single people (BBC, 2016). To date, it is estimated that more than 25,000 babies have been born through surrogacy arrangements in India many commissioned by Western commissioning couples (Shetty, 2012). The complexity of bringing home babies commissioned in another country (Crawshaw, Blyth, & van den Akker, 2012) add further fuel to the ethical and moral rights and wrongs of inequalities between the developed and developing nations. It potentially allows for the masking of the trafficking and buying of babies and the using and exploitation of poor women by those with substantially more wealth. Participating in arrangements which have been likened to baby 'factories' or 'farms' where poor (or abducted) women live to produce babies (Kroløkke & Pant, 2012; Kumar et al., 2013; Riggs & Due, 2010; van den Akker, 2017) cannot be condoned. Future generations resulting from such origins may wonder about the human costs of their conception.

Epigenetic influences

Individuals conceived via surrogacy particularly if donor gametes are used, may also have been conceived under financially determined conditions, or via malpractice on behalf of unscrupulous brokers, donors, surrogates or clinics. Recently, a donor who was registered as 'handsome and healthy, with several degrees and a genius-level IQ' was in fact exposed as a convicted criminal and college dropout with schizophrenia. The 36 children born from his

sperm were therefore at a genetic risk for schizophrenia (Stapleton, 2016 CNN news). The importance of genetics is increasingly relevant to third party reproduction. However, the importance of epigenetic influences - factors relating to the developing embryo's developmental flexibility to its environment including the quantity and quality of nutrient availability and the embryo/foetus's compensatory responses interacting with the delivery of the needs for the foetus (EpiHealth, 2016) – are not yet sufficiently considered in third party AC research, policy and practice.

Research into the outcome of genetic and gestational surrogate pregnancies considers the importance of pregnancy and live birth rates. Little attention is paid to the effects of the clinical 'in vitro' route to the pregnancy (Gardner & Lane, 2004) or the psychological state and physiological competence of the surrogate mother during the pregnancy which will contribute to determining the growth and wellbeing of the foetus. Surrogates are known not to attach to the foetus and their health behaviours, including drug, alcohol, dietary, smoking and exercise behaviours during the pregnancy will influence the foetus's epigenetic health and future wellbeing.

Although it is reassuring to know that malformations in gestational surrogate babies are comparable to those reported in the general population (Parkinson, Tran, Tan, Nelson, & Serafini, 1999) infertile couples using IVF or ICSI are at a greater risk of a number of adverse outcomes (Yeung et al., 2016). Premature deliveries (Koudstaal et al., 2000), pregnancy complications and low birthweight babies (Schieve et al., 2002) have been reported. It is not yet known if factors related to the IVF techniques or prenatal factors are responsible for these adverse outcomes, since adverse outcomes are reportedly lower after surrogate pregnancies (Schieve et al., 2002). On the other hand, there is an association between oocyte donation and low birthweight, pregnancy complications and caesarean sections (Savasi et al., 2016). Since gestational surrogates undergo embryo transfer with 'donated' oocytes (from the

commissioning mother or a donor) these pregnancies are likely to be at the same risks as oocyte recipients and their babies in IVF treated cycles. Finally, psychologically, not bonding with the foetus in pregnancy may benefit a surrogate and make the relinquishment easier (van den Akker, 2003; 2007), but the foetus is influenced by her (the surrogate's) behaviours and mental state. Some surrogates' behaviours may therefore have consequences for the developing foetus (Egliston, McMahon, & Austin, 2007; Ombelet, De Sutter, Van der Elst, & Martens, 2005) and these effects are under investigated in general (Purewal, Chapman, & van den Akker, 2017) and in surrogacy in particular.

Welfare issues

Surrogate motherhood may disadvantage the child or surrogate mother (Agnafors, 2014), and ethical and legal complications have been reported in surrogate motherhood arrangements (Brinsden, 2003). There are also numerous reports indicating surrogates experience of surrogacy tends to be positive rather than negative and separation from the child is generally problem free. Neither do surrogate mothers show major psychological problems following the surrogacy arrangement (Jadva, Murray, Lycett, MacCallum, & Golombok, 2003; MacCallum, Lycett, Murray, Jadva, & Golombok, 2003; Ruiz-Robledillo & Moya-Albiol, 2016; Söderström-Anttila et al., 2016; van den Akker, 2003). Surrogate mothers are even reported to be empowered by the process (DasGupta & Dasgupta, 2014). Altruistic surrogates in particular, are happy with their choice and felt empowered by their surrogate experiences (Blyth, 1994; van den Akker, 2005). They reject some of the commodification arguments and assert their right to decide what to do with their own body (Bromfield, 2016). In Western contexts the main reasons that lead women to become altruistic surrogate mothers are not primarily financial, but a relatively altruistic desire to help others (Imrie & Jadva, 2014; Markens, 2012; van den Akker, 2003), although they do receive payment which they acknowledge as important.

Gestational surrogate children's psychological adjustment does not differ from naturally conceived children and the lack of the genetic / gestational link between the commissioning parent(s) and their child(ren) does not impact negatively upon parent–child relationships (Bos & van Balen, 2010; Golombok et al., 2006; Golombok et al., 2011; Ruiz-Robledillo & Moya-Albiol, 2016; Shelton et al., 2009). There is some evidence that adjustment problems have been reported in surrogate children compared to children born through gamete donation (Golombok, Blake, Casel, Roman, & Jadvá, 2012). Importantly, the surrogate's own children do not experience negative consequences after their mother's surrogate pregnancy and relinquishment of the baby in altruistic surrogacy (Jadvá & Imrie, 2014). It is probable that support for all involved in third party AC is likely to be necessary in the foreseeable future, particularly where non-disclosure has been practiced (Crawshaw, Frith, van den Akker, & Blyth, 2016).

Summary

The competing interests and interactions between legal, organizational, health, personal, social, psychological and cultural issues in transitioning to non-biological and non-genetic parenthood are under explored. Third party assisted reproductive healthcare and surrogate motherhood services result in the creation of families with part or full genetic and gestational difference from the parent(s) seeking the services. Genetic and gestational differences in these families are often hidden. At the other end of the spectrum, biological and genetic (half) siblings and grandparents with partial or full genetic and gestational similarity are in too many cases denied knowledge of and nearly always, denied contact with the third party offspring. The psychological adaptation required to changes in public opinions, technology and legislation in third party reproduction and surrogate motherhood impacts at individual, societal and global levels. The evidence that some donors, surrogates, recipients and offspring demonstrate conflict or dissonance about their involvement in third party conception indicates a need to address these concerns in future research, policy and practice.

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